

# CA4

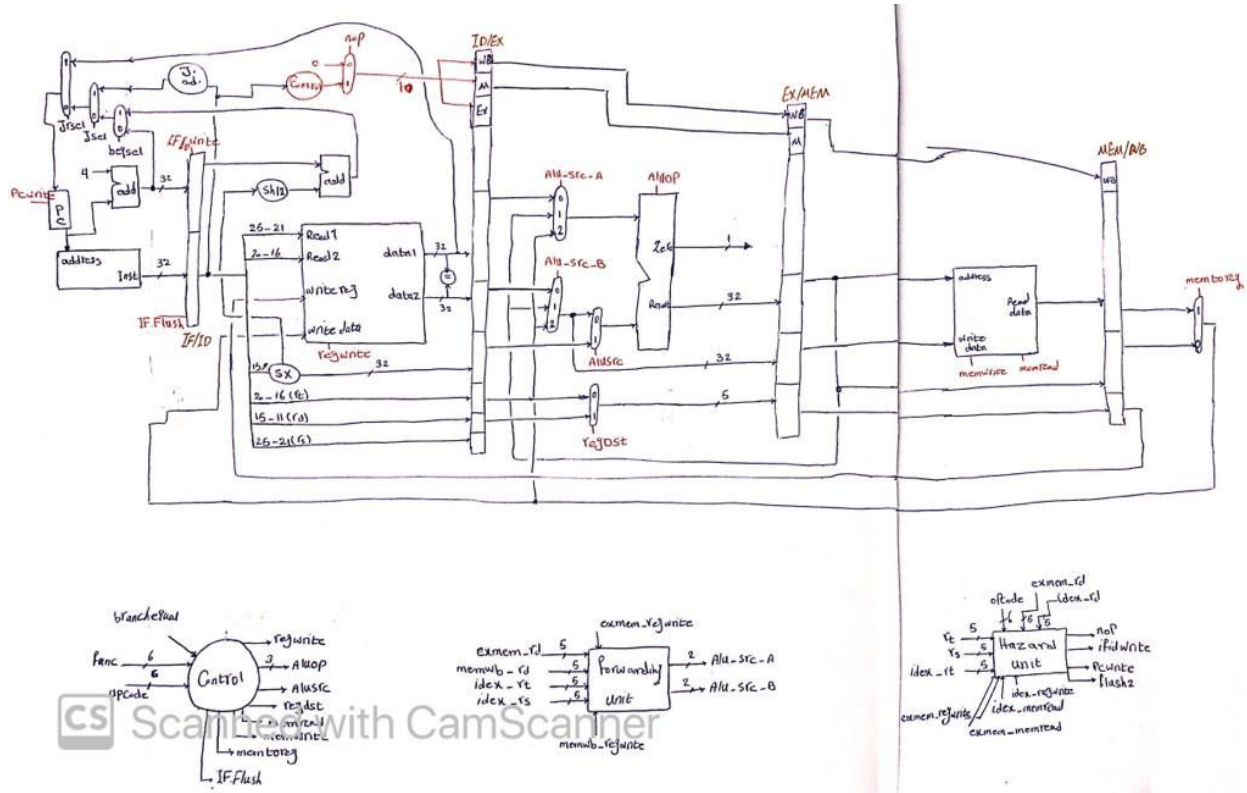
D.Safari

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## Datapath & controller design



Data path is implemented as we saw in lectures. Control signals are generated With three different components ; **Control, Forwarding, Hazard**

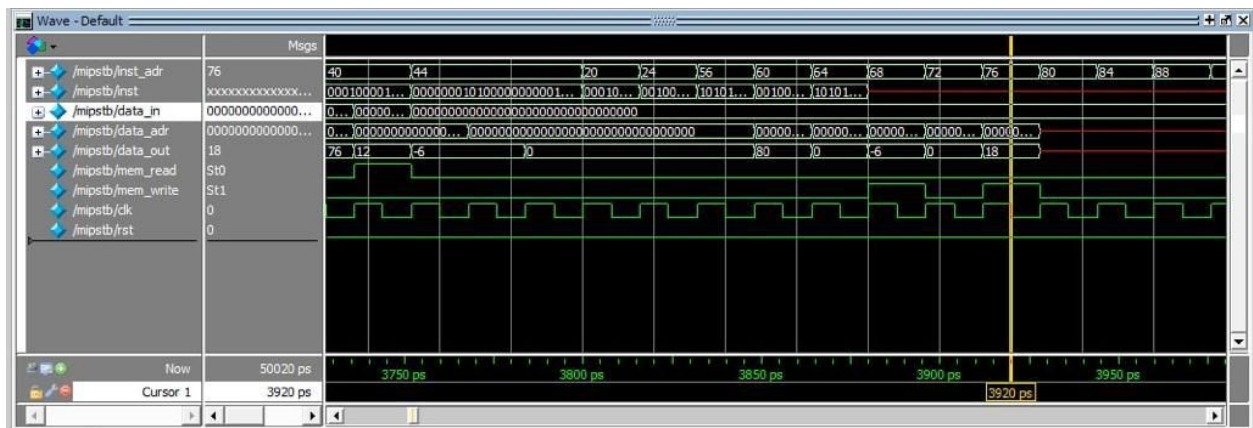
**Hazard** : Detects hazards and generates signals to stall the pipeline.

**Forwarding** : forwards Data in specific instructions.

**Control** : Generates other controlling signals.

## Simulation Results

Instructions and details are the same as the previous computer assignment And we expect The processor to Give us the right answers without any complain about hazards and The result is shown below :



As you can see the answers or expected and the result is true